

CLAIMS

1. A telephone interpretation assistance device comprising:  
headset connection jacks to which headsets to be used by an  
5 interpretee and a conversation partner who speak different  
languages are connected, respectively; a telephone connection  
jack to which a telephone terminal for holding a call with an  
interpreter is connected; synthesis means for synthesizing  
voice signals input from the respective headset connection  
10 jacks, and outputting the resultant to the telephone  
connection jack; detection means for detecting a switch signal  
from a voice signal input from the telephone connection jack;  
and switching means for outputting the voice signal input from  
the telephone connection jack to designated one of the headset  
15 connection jacks based on the switch signal detected by the  
detection means.
2. The telephone interpretation assistance device according to  
claim 1, wherein the synthesis means multiplexes the voice of  
the interpretee and the voice of the conversation partner.
- 20 3. A telephone interpretation system for providing a telephone  
interpretation service by using the telephone interpretation  
assistance device according to claim 1 or 2, comprising:  
connecting means for connecting an interpretee terminal and an  
interpreter terminal; and communication means for conducting  
25 voice communications between the terminals connected by the

connecting means, wherein

the connecting means has an interpreter registration table containing at least the language types possible for interpreters to interpret and terminal numbers of the  
5 interpreters; and

the telephone interpretation system has functions of:  
accepting a call from the interpretee terminal; acquiring the language type of the interpretee and the language type of the conversation partner from the interpretee terminal of which  
10 the call is accepted; extracting the terminal number of an interpreter by referencing the interpreter registration table based on the language type of the interpretee and the language type of the conversation partner acquired; and calling the interpreter terminal by using the extracted terminal number of  
15 the interpreter.

4. The telephone interpretation system according to claim 3, wherein the communication means has functions of: recording the voice from the interpretee terminal and the voice from the interpreter terminal; and reproducing and transmitting the  
20 recorded voices by a request from the terminals.

5. A telephone interpretation assistance device for conducting telephone interpretation with bidirectional simultaneous interpretation, comprising an interpretee-side telephone interpretation assistance device and an interpreter-side  
25 telephone interpretation assistance device, wherein

the interpretee-side telephone interpretation assistance device comprises: an interpretee headset connection jack to which a headset to be used by an interpretee is connected; a conversation partner headset connection jack to which a 5 headset to be used by a conversation partner is connected; a telephone connection jack to which a telephone terminal for holding a call with an interpreter is connected; multiplexing means for multiplexing a voice signal input from the interpretee headset connection jack and a voice signal input 10 from the conversation partner headset connection jack as the first channel and the second signal, respectively, and outputting the resultant to the telephone connection jack; and demultiplexing means for demultiplexing a voice signal input from the telephone connection jack into the first channel and 15 the second channel, and outputting the first and second channels to the interpretee headset connection jack and the conversation partner headset connection jack, respectively; and

the interpreter-side telephone interpretation assistance device comprises: a first interpreter headset connection jack to which a headset to be used by a first interpreter who 20 interprets the language of the conversation partner into the language of the interpretee is connected; a second interpreter headset connection jack to which a headset to be used by a second interpreter who interprets the language of the 25

interpretee into the language of the conversation partner is connected; a telephone connection jack to which a telephone terminal for holding a call with the interpretee is connected; demultiplexing means for demultiplexing a voice signal input from the telephone connection jack into the first channel and the second channel, and outputting the first and second channels to the second interpreter headset connection jack and the first interpreter headset connection jack, respectively; and multiplexing means for multiplexing a voice signal input from the first interpreter headset connection jack and a voice signal input from the second interpreter headset connection jack as the first channel and the second channel, respectively, and outputting the resultant to the telephone connection jack.

6. A telephone interpretation system for providing a bidirectional telephone interpretation service by using a interpretee-side telephone interpretation assistance device comprising: an interpretee headset connection jack to which a headset to be used by an interpretee is connected; a conversation partner headset connection jack to which a headset to be used by a conversation partner is connected; a telephone connection jack to which a telephone terminal for holding a call with an interpreter is connected; multiplexing means for multiplexing a voice signal input from the interpretee headset connection jack and a voice signal input from the conversation partner headset connection jack as the

first channel and the second channel, respectively, and outputting the resultant to the telephone connection jack; and demultiplexing means for demultiplexing a voice signal input from the telephone connection jack into the first channel and 5 the second channel, and outputting the first and second channels to the interpretee headset connection jack and the conversation partner headset connection jack, respectively, wherein:

the telephone interpretation system comprises: connecting 10 means for establishing connection among an interpretee terminal, a first interpreter terminal to be used by a first interpreter who interprets the language of the conversation partner into the language of the interpretee, and a second interpreter terminal to be used by a second interpreter who 15 interprets the language of the interpretee into the language of the conversation partner; and communication means for conducting voice communications among the terminals connected by the connecting means; and

the communication means has a demultiplexing function of 20 demultiplexing a voice signal from the interpretee terminal into the first channel and the second channel, and transmitting the first and second channels to the second interpreter terminal and the first interpreter terminal, respectively, and a multiplexing function of multiplexing a 25 voice signal from the first interpreter terminal and a voice

signal from the second interpreter terminal as the first channel and the second channel, respectively, and transmitting the resultant to the interpretee terminal.

7. The telephone interpretation system according to claim 6,  
5 wherein the connecting means has an interpreter registration table containing at least the language types possible for interpreters to interpret and terminal numbers of the interpreters, and the telephone interpretation system has functions of: accepting a call from the interpretee terminal;  
10 acquiring the language type of the interpretee and the language type of the conversation partner from the interpretee terminal of which the call is accepted; extracting the terminal number of the first interpreter by referencing the interpreter registration table based on the language type of  
15 the conversation partner and the language type of the interpretee acquired; calling the first interpreter terminal by using the extracted terminal number of the first interpreter; extracting the terminal number of the second interpreter by referencing the interpreter registration table  
20 based on the language type of the interpretee and the language type of the conversation partner acquired; and calling the second interpreter terminal by using the extracted terminal number of the second interpreter.

8. The telephone interpretation system according to claim 6 or  
25 7, wherein the communication means has functions of: recording

the voice from the interpretee terminal, the voice from the first interpreter terminal, and the voice from the second interpreter terminal; and reproducing and transmitting the recorded voices by a request from the terminals.

- 5 9. The telephone interpretation system according to any one of claims 3, 4, 7, and 8, wherein:

the interpreter registration table contains selection information for selecting interpreters; and

the connecting means has functions of acquiring an

- 10 interpreter selection condition from the interpretee terminal, and extracting the terminal number of an appropriate interpreter by referencing the interpreter registration table based on the interpreter selection condition acquired.

10. The telephone interpretation system according to any one of claims 3, 4, 7, 8, and 9, wherein:

the interpreter registration table contains availability flags for indicating whether or not the interpreters are available; and

the connecting means has a function of extracting the

- 20 terminal number of an available interpreter by referencing the availability flags in the interpreter registration table.

11. The telephone interpretation system according to any one of claims 3, 4, 7, 8, 9, and 10, wherein:

the interpreter registration table has a function of  
25 registering accounting information on the interpreters; and

the connecting means has functions of measuring the time for the interpretee terminal to receive interpretation services, and calculating fees from the measured time and the accounting information registered in the interpreter

5 registration table.